



TO: NSPE Board of Directors
cc: State Society Executives Committee

FROM: Mark J. Golden, FASAE, CAE 
Executive Director

DATE: 2 February 2015

RE: Board Update: January 15-31, 2015

1. Member Value

The joint efforts by the Licensure and Qualifications for Practice Committee and the Professional Engineers in Higher Education interest group to integrate the NSPE Engineering Body of Knowledge (EBoK) into university freshman course assignments, first discussed in my last report, continues to build momentum. New Mexico State University used the exercise in its ENGR 100 class late last month. According to NSPE PEHE BoD Director David Rockstraw: "Initial feedback indicates the assignment was very successful and opened freshmen eyes to requirements of becoming an engineer beyond mathematics. Concepts such as ethics were foreign to them, and the EBoK helped them to realize the broad range of skills they would need to develop to be successful." LQPC/PEHE continues to pursue other opportunities at Florida International University and the University of New Hampshire.

Following up on the board's approval in Florida, NSPE has made it even easier for members to access professional development and continuing education with the launch of the [PE Institute](#), which has a catalog of live educational events, webinars, and conferences for the professional engineer. As engineering disciplines become more specialized, continuing education becomes more crucial to managing a rising career. All events provided by NSPE, its state societies, and partners are available to members at a discount. We strongly feel this is an invaluable new way for state societies to promote and sell their own CE programs. I urge all directors to encourage their state societies to take advantage of this free, national marketing platform.

In the last calendar year (our first in partnership with Boxwood), the NSPE online job board included:

- 1,465 job postings;
- which were viewed 838,412 times;
- 444 employers registered with the site; and
- 2,731 job seekers registered with the site.

This activity generated \$123,000 in non-dues revenue for NSPE. NSPE negotiated terms with Boxwood that would permit state societies to create state-specific sections within the network at favorable terms. To date two state societies (New Jersey and New York) have taken advantage of this opportunity.

The Engineers Joint Contract Documents Committee (EJCDC) has released 2015 editions of documents addressing owner and engineer for professional services agreements and a new contract document for design-build projects:

- *EJCDC E-520, Short Form of Agreement between Owner and Engineer for Professional Services*, intended primarily for use for professional services of limited scope and complexity.
- *EJCDC E-525, Agreement between Owner and Engineer for Study and Report Professional Services*, used to retain an engineer to prepare a study and report, e.g., feasibility studies, facility needs, treatment options, or siting challenges.
- *EJCDC D-580, Teaming Agreement to Pursue Joint Business Opportunity for Design-Build Project*, a new contract document for use by design-build firms that wish to work with an engineering firm to pursue a design-build opportunity.

The 2015 editions of all EJCDC documents will remain in the legacy format and delivery system. Formatted in Microsoft Word, there is no software to install or learn, saving users time and money. The documents are downloaded at the time of purchase and saved directly to the user's computer. They can be customized easily to suit each project's unique goals and regulatory.

NSPE members get a 50% discount when they purchase EJCDC documents through our website:

https://netforum.nspe.org/eweb/DynamicPage.aspx?site=ShopCart&Webcode=COE_ejcdc_owner

2. Advocacy

NSPE Government Relations and Legal staff have been consulting with numerous state societies as legislation is introduced in their respective state legislatures. We have been providing counsel on an array of issues, such as procurement (QBS) and Good Samaritan laws, among others. As state legislatures reconvene for new sessions, if NSPE can be of any assistance to your state, please do not hesitate to reach out to Art Schwartz and Arielle Eiser.

Arielle Eiser met with top staff for the newest PE in the United States Congress, Representative Bruce Westerman, PE (Republican, Arkansas) to discuss opportunities for collaboration and support. NSPE looks forward to working closely with the PE caucus in the Congress.

The NSPE Political Action Committee (PAC) Board of Trustees is developing a message to be sent to full membership to kick off the 2016 election cycle. NSPE-PAC had a very productive and successful 2014 campaign. The next two years provide an opportunity to substantially build on this success. To learn more about NSPE-PAC and contribute you can visit:

<http://www.nspe.org/resources/issues-and-advocacy/nspe-pac>

I was delighted to see a terrific press release from the Army Corps Nashville District, recognizing five new PEs in their district and also going into great depth/detail on the value of the license:

http://www.dvidshub.net/news/152977/corps-engineers-takes-constructive-approach-developing-its-engineers#.VMgqk_J0zDc

NSPE will again co-sponsor the 2015 Engineering Public Policy Symposium on Capitol Hill, April 21st. That role will be highlighted in all communications and signage related to the event.

3. Content

On Tuesday of this week, numerous NSPE volunteers and I will participate in an online workshop taking the development of a competency model for the engineering profession to the next level. As I have previously reported, this project was initiated by the American Association of Engineering Societies (AAES) Life Long Learning Working Group, of which I am a member. It is being pursued by AAES in partnership with the US Department of Labor, and partially funded by a grant from the United Engineering Foundation.

Competency models for almost every industry in the United States are collected and showcased by the Department of Labor and others for use in a number of ways¹. Specifically for the engineering profession, the competency model will establish a more consistent employment guideline for employers, and provide employees, prospective employees, workforce training providers, educators and others a clear understanding of how best to enter, advance, and succeed in the industry. With the gamut of professional opportunities offered by the engineering sector, and our leading position in creating employment opportunities in our nation's economy, this represents a critical and foundational workforce development.

Subject Matter Experts from AAES member societies², representing both industry and academia, have been working for several months with the Department of Labor to develop the current draft Engineering Competency Model and survey the AAES member societies.

Following the survey and webinar, the results will be collated and further revised in a validators meeting, April 22nd in Washington. We anticipate that the Competency Model will be ready in early summer 2015, at which time we will seek broader industry approval with a goal to publish it in final form on the [US Department of Labor's Competency Model Clearinghouse](#) in the fall of 2015 and publicize its availability to a broad base of stakeholders.

Obviously, no one organization or individual can take credit for such a broad-based and collaborative a project; however, it is worth noting that NSPE's fingerprints are all over the current competency model draft. NSPE's EBoK content is heavily reflected in it. Indeed, behind the scenes "evangelization" for EBoK with NCEES leadership (NCEES chairs the competency model committee) started long before the project itself did. NSPE was heavily involved in getting AAES to take on the project, securing the grant that is now funding it, and seeding the working groups with EBoK-aware individuals.

4. Collaboration

The EWeek Foundation will host a short webinar on Thursday, February 19th at 1:00 pm (Eastern) to announce the nominees for the "New Faces of Engineering (Professional and College Edition)." Feel free to join in by registering at: <https://attendee.gotowebinar.com/register/1532626114763150081>

¹ For an example of a competency model (in this case, for the advanced manufacturing industry) and how the Department of Labor uses them in their "Career One Stop" website, see:

<http://www.careeronestop.org/CompetencyModel/competency-models/advanced-manufacturing.aspx>

² NSPE's Subject Matter Representative on the working group is Past President Terri Helmlinger-Ratcliff, PhD, PE, FNSPE.

EWeek is also kicking off its 2015 Educator Awards, spotlighting educators around the world who are inspiring tomorrow's generation of innovative engineers in 6th to 12th grade classrooms. Three winners will receive a trip to Washington, D.C., a \$2,000 cash prize, and a 3M gift pack of classroom supplies. Eight runners-up will receive \$500 each and gift packs. The deadline for nominations is March 16, 2015. More information can be found at:

<http://www.discovere.org/our-programs/awards-and-recognition/>

EWeek's "Introduce a Girl to Engineering Day" is February 26th, and our state societies are encouraged to post any state/local plans and events on the DiscoverE online events calendar:

<http://www.discovere.org/our-programs/upcoming-events/suggest-event>

This year, DiscoverE is producing a new social media campaign for Girl Day called: "There is a little engineer in every girl: #Bring it Out." Aimed at parents, teachers, and other adult influencers, a call to action in this campaign will go out soon.

There will also be a short webinar on February 11th at 12:00 noon (Eastern) to give Girl Day partners a sneak peak at the campaign and video resources. If you'd like to participate, please register at:

<https://attendee.gotowebinar.com/register/3553451519868910850>

NSPE will again host its popular hands-on activity "Pop Fly: Catapults in Action" at the 22nd annual Discover Engineering Family Day on February 28 at the National Building Museum. This event draws thousands of kids and families from the DC metro area for activities and exhibits designed to introduce kids to the wonder of engineering. For more details on the event, and to see photos/videos from last year, visit: <http://www.engineeringfamilyday.org/>

5. Member Engagement

Overall, the total number of NSPE members as of December 31, 2014 (all membership categories) is down 1.78% (from 33,616 to 33,016) from December 31, 2013. 18 of 53 state societies saw net membership *increases* in calendar year 2014, with New Hampshire, Oregon, Guam, DC and South Carolina achieving double-digit percentage increases. An additional ten states were essentially flat, with membership numbers decreasing by 0 to 2%.

Collectively, NSPE is actually up 780 members from the start of the fiscal year (July 1, 2014) to date, however bear in mind that the largest cohort of renewals falls on December 31st and non-renewals do not hit these figures until the end of March. We are doing all we can with outreach to those members, including the now annual outsourced telemarketing effort that will take place in February.

We started outreach to December 31st expires a month earlier than usual this year, which ironically may have *depressed* December renewal numbers, compared to last year, since we are spreading renewal receipts out over three months instead of two. A hopeful sign: we are also experiencing heavier than usual January renewals.

6. Professional and Leadership Development

NSPE Fellow member nominations are being received at NSPE headquarters, and as of January 30th, 23 nomination packets have been reviewed and found to be in compliance with the strict nomination instructions. The Council of Fellows Executive Committee has targeted mid-March for submission of its final report and recommendations to the NSPE Board of Directors.

7. Finance, Administration, Operations and Staff Alignment

December financials have been reviewed by the Treasurer and circulated to the staff. NSPE revenues are \$127,000 under budget for the six month reporting period, largely offset by expenses being held \$98,000 under budget. A major source of this revenue shortfall is attributable to delays implementing a more productive investment strategy for association reserve funds³. NICET's bottom line for the same period is \$326,000 ahead of budget, leaving the Society's combined operations on solid financial footing.

As I discussed with the board in Hollywood, although the Society is operating on a sound basis, the current year's budget projections have proven to be unreliable. (Oversimplifying, NSPE operations used overly optimistic projections; NICET projections have proven to be impractical in scope and overly pessimistic in projections.) I have mapped out a process for FY16 budget development (for the year beginning July 1st) that will start by making more realistic projections for the current year. This refined budget will establish a more reliable baseline for planning and allow for a higher confidence level in projections to be incorporated into next year's budget.

This year's budget planning will also more fully engage individual staff program and budget managers in developing their own program budgets⁴. We are planning to incorporate major simplifications in the chart of accounts in the FY16 budget. This is something the auditors recommended. It adds an additional level of required effort to the budget development process and will make financial reports much more straightforward and meaningful.

The work plan is predicated on having staff's advance work on a draft budget completed by the middle to end of March, allowing plenty of time for budget committee engagement and review, and presenting a budget for board review and approval on its April 22nd conference call meeting (nearly two months ahead of last year's schedule).

I am pleased to report that we are getting a large number of responses to our posting for the chief staff financial officer position. So far, approximately 12 applicants have presented strongly enough on paper to warrant an interview. I have first round interviews with the five strongest candidates scheduled for this week.

³ NSPE has traditionally not invested reserves in anything other than CDs, which continue to have historically low rates of return. Per the Finance Committee's direction, we are reaching out to the Educational Foundation and EWeek Foundation regarding forming a joint Investment Committee, and starting a process of creating an investment policy (setting the investment parameters and risk tolerance the board is comfortable with), prior to selecting an appropriate investment manager.

⁴ NSPE had historically centralized financial planning in a manner that resulted in less realistic budgets and reduced individual staff budget manager accountability. Changing the culture and approach to budget planning and administration has been a focus for me.

The Missouri Society of Professional Engineers informed us this week that they will be taking over billing of three-tier members in the state, effective with July 31st renewals. We will work closely with the Society to ensure a seamless transition.

On the NICET front: staff has increased efforts to encourage past candidates to test. This has begun with those in disciplines that are being or will soon be transitioned to the new Standard Model/Computer Based Test exams, more specifically in Special Hazards Suppression Systems and Highway Construction. Several direct communications have been sent to all current certificants in these specialty areas, and we have continued to note the transition timetables/dates in each quarterly newsletter and on the NICET website.

NICET is also continuing its efforts to expand existing testing activities into new markets: e.g.; active-duty military personnel, and US employers working internationally.

In the critical area of program maintenance activities, staff has begun to update the Water-Based Systems Layout – Level III examinations to the 2013 editions of the referenced NFPA standards as planned. It has successfully updated all three levels of the Inspection & Testing of Water-Based Systems examinations. Staff is now focused on development efforts with the newly-approved Fire Alarm Systems Inspection & Testing program.

In regard to Candidate Evaluations and customer service standards, NICET staff has already begun to establish and adhere to shorter turnaround times. Along with these faster turnaround times, staff has increased their efforts to work with candidates over the telephone and through email to explain our requirements and what information is needed in order to correct the more minor issues without requiring the delays inherent in a Conditional Decision Letter (CDL) or Supplemental CDL.

8. Governance

This year the Candidate Screening Committee will be screening two candidates for the position of NSPE 2015-16 Vice President (to serve as NSPE President in 2017-18) and one candidate for re-election to the position of Treasurer. The Virginia Society of Professional Engineers nominated Thomas G. Conway, PE (Alexandria, Virginia) for Vice President; the Kansas Society of Professional Engineers nominated Thomas C. Roberts, PE, FNSPE (Manhattan, Kansas) for the same position. The Texas Society of Professional Engineers nominated Julia M. Harrod, PE, FNSPE (Austin, Texas) for a second term as Treasurer.

The first phase of the screening process has begun with a series of questions submitted to the VP candidates requesting the return of their written responses by March 2nd. After the committee has reviewed these questionnaires, preparations will begin for the personal interview phase of the screening process. The committee is on track to have its written report presented to the NSPE Secretary by, or before, the May 15th deadline set forth in the bylaws.

Following up on the board's actions in Hollywood, Florida, we have formally completed the following:

- communicated NSPE's comments on ABET EAC Criteria 3 and 5;
- submitted approval of ABET's constitution amendments, and
- relayed our support of the "Educating Engineers to Meet the Grand Challenges" to AAES.

Finally, please remember that access to NSPE leadership resources is always available to you in the Leadership Toolbox at www.nspe.org/toolbox. You will need to log in with your user name and password.

You can also review a detailed calendar of NSPE and state society events on the website at: www.nspe.org/AboutNSPE/Events/index.html.